

CLAIMS - YA0002

What is claimed is:

1. An integrated circuit structure, comprising:
 - a plurality of transistors;
 - a plurality of thin-film conductor interconnects, interconnected to form electronic circuits in a predetermined electrical configuration;
- 5 a plurality of pairs of contact pads, connected to said thin-film conductor interconnects, each adjacent pair of contact pads including a first pad of a first conductive material and a second pad of a second conductive material, and being electrically connected only by a conductive oligomer of a precisely predetermined number of units.

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2. A process for manufacturing integrated circuits, comprising the steps of:

- a.) providing a substrate;
- b.) forming a plurality of transistors on said substrate;
- 5 c.) forming conductive interconnects on said substrate to interconnect said transistors in a predetermined electrical configuration;
- d.) forming, among said interconnects, pairs of conductive contact pads; and
- 10 e.) automatically forming polymeric conductors to electrically connect respective pairs of conductive contact pads in a self-aligned step.

3. The process of Claim 2, wherein said pairs include a first metal and a second metal, and said polymeric conductors attach asymmetrically with a first terminus attached to said first metal and a second terminus attached to said second metal.

4. The process of Claim 2, wherein said polymeric conductors each consist of an oligomer of a precisely predetermined number of units.

5. The process of Claim 2, wherein said polymeric conductors each consist of an oligomer of a precisely predetermined number of units, and wherein a first step forms a first set of oligomers having a first predetermined length, and a second step forms a second set of oligomers having a second predetermined length.